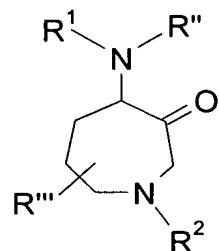


We claim:

1. A method of inhibiting cathepsin L, comprising administering to a patient in need thereof an effective amount of a compound of Formula I:

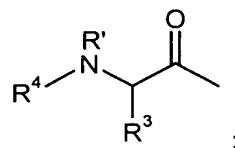
5



I

wherein:

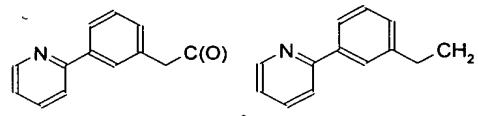
R¹ is



10

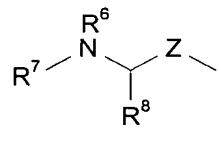
;

R² is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, Het-C₀₋₆alkyl, R⁹C(O)-, R⁹C(S)-, R⁹SO₂-, R⁹OC(O)-, R⁹R¹¹NC(O)-, R⁹R¹¹NC(S)-, R⁹(R¹¹)NSO₂-; and



15

;



R³ is H, C₁₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, HetC₀₋₆alkyl and ArC₀₋₆alkyl;

R³ and R' may be connected to form a pyrrolidine, piperidine or morpholine ring;

R⁴ is R⁵OC(O)-;

20

R⁵ is quinolin-6-yl;

R⁶ is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R⁷ is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, Het-C₀₋₆alkyl, R¹⁰C(O)-, R¹⁰C(S)-, R¹⁰SO₂-, R¹⁰OC(O)-, R¹⁰R¹⁴NC(O)-, or R¹⁰R¹⁴NC(S)-;

R⁸ is H, C₁₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, HetC₀₋₆alkyl or ArC₀₋₆alkyl;

R⁹ is C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl or Het-C₀₋₆alkyl;

5 R¹⁰ is C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl or Het-C₀₋₆alkyl;

R¹¹ is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R¹² is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R¹³ is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R¹⁴ is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

10 R' is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R" is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R''' is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

X is CH₂, S, or O; and

Z is C(O) or CH₂;

15 and pharmaceutically acceptable salts, hydrates and solvates thereof.

2. A method according to Claim 1 wherein in said compound R³ is C₁₋₆alkyl and Ar-C₀₋₆alkyl.

20 3. A method according to Claim 2 wherein in said compound R³ is isobutyl, naphthalen-2-ylmethyl, benzyl, or benzyloxymethyl.

4. A method according to Claim 1 wherein in said compound R' is H.

25 5. A method according to Claim 1 wherein in said compound R" is H.

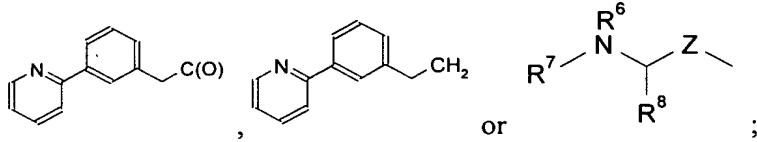
6. A method according to Claim 1 wherein in said compound R''' is H.

7. A method according to Claim 1 wherein in said compound R" and R''' are both H.

30

8. A method according to Claim 1 wherein in said compound:

R^2 is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, Het-C₀₋₆alkyl, R⁹C(O)-, R⁹C(S)-, R⁹SO₂-, R⁹OC(O)-, R⁹R¹¹NC(O)-, R⁹R¹¹NC(S)-, R⁹R¹¹NSO₂-,



5 R^6 is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R^7 is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, Het-C₀₋₆alkyl, R¹⁰C(O)-, R¹⁰C(S)-, R¹⁰SO₂-, R¹⁰OC(O)-, R¹⁰R¹⁴NC(O)-, or R¹⁰R¹⁴NC(S);

R^8 is H, C₁₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, HetC₀₋₆alkyl or ArC₀₋₆alkyl;

R^9 is C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

10 R^{10} is C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl or Het-C₀₋₆alkyl; and
 Z is C(O) or CH₂.

9. A method according to Claim 8 wherein in said compound R^2 is R⁹SO₂.

15 10. A method according to Claim 9 wherein in said compound R^9 is Het-C₀₋₆alkyl.

11. A method according to Claim 10 wherein in said compound R^9 is pyridinyl or 1-
 oxy-pyridinyl.

20 12. A method according to Claim 11 wherein in said compound R^9 is pyridin-2-yl or 1-
 oxy-pyridin-2-yl

13. A method according to Claim 12 wherein said compound is:

 quinoline-6-carboxylic acid {(S)-naphthyl-2-yl-1-[(S)-oxo-1-(pyridine-2-
 sulfonyl)-azepan-4-yl carbamoyl]-ethyl}-amide, or

 quinoline-6-carboxylic acid {(S)-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-
 azepan-4-yl carbamoyl]-2-phenyl-ethyl}-amide; or

 a pharmaceutically acceptable salt, hydrate or solvate thereof.

14. A method of treating a disease characterized by positive selection of CD4⁺T-cells by cortical thymic epithelial cells comprising inhibiting said positive selection of CD4⁺T-cells by cortical thymic epithelial cells by administering to a patient in need thereof an effective amount of a compound according to claim 1.